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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

BRAHMACHARI *et al.*

Application No.: 09/707,919

Filed: November 8, 2000

For: METHOD OF DETECTION OF ALLELIC  
VARIANTS OF SCA2 GENE

Attorney Docket No.: 39562-175772

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) Group Art Unit: 1645  
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)  
) Examiner: J.A. Goldberg  
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)  
) **AMENDMENT**  
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)  
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Customer No.



26694

PATENT TRADEMARK OFFICE

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Please amend the above-referenced application as follows, and consider the remarks below. It is not believed that any fee is due. Please charge any additional fee required or refund any overpayment to deposit account no., referencing 39562-175772.

IN THE SPECIFICATION:

Amend the specification as follows:

On page 16, replace the paragraph beginning at line 5 with the following:

b) --5' C TCC GCC TCA GAC TGT TTT GGT AGC AAC GGC AAC GGC GGC GGC  
GCG TTT CGG CCC GGC TCC CGG CGG CTC CTT GGT CTC GGC GGG CCT  
CCC CGC CCC TTC GTC GTC CTC CTT CTC CCC CTC GCC AGC CCG GGC GCC  
CCT CCG GCC GCG CCA ACC CGC GCC TCC CCG CTC GGC GCC CGC GCG  
TCC CCG CCG CGT TCC GGC GTC TCC TTG GCG CGC CCG GCT CCC GGC  
TGT CCC CGC CCG GCG TGC GAG CCG GTG TAT GGG CCC CTC ACC ATG

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B1  
cancel

TCG CTG AAG CCC CAG CAG CAG CAG CAG CAG CAG CAA CAG CAG  
CAG CAG CAA CAG CAG CAG CAG CAG CAG CAG CCG CCG CCC GCG  
GCT GCC AAT GTC CGC AAG CCC GGC GGC AGC GGC CTT CTA GCG TCG  
CCC GCC GCC GCG CCT TCG CCG TCC TCG TCC TCG GTC TCC TCG TCC TCG  
GCC AC 3' (SEQ ID NO:13)--

IN THE CLAIMS:

Cancel claims 10, 11, 15 and 17 without prejudice and enter the following amended claims:

B2

12. A diagnostic kit for the detection of SNP haplotypes (CC/GT) comprising at least one nucleic acid consisting of a nucleic acid selected from the group consisting of SEQ ID NO: 1-12.

B3

14. A method for predicting a risk of an individual to human spinocerebellar ataxia 2 (SCA2) disease, said method comprising:

- a) amplifying genomic DNA of said individual using oligonucleotide primers to the CAG repeat-containing region of exon 1 of human SCA2 gene to obtain an amplified PCR product;
- b) identifying the nucleotides present at the polymorphic sites at nucleotides 107 and 178 of SEQ ID NO: 13; and
- c) predicting the risk of the individual to SCA2 disease based upon the haplotype present at the polymorphic sites at nucleotides 107 and 178 of SEQ ID NO:13, wherein a G at position 107 of SEQ ID NO:13 and a T at position 178 of SEQ ID NO: 13 haplotype is indicative of a lower risk of SCA2 disease, and wherein a C at position 107 of SEQ ID NO:13 and a C at position 178 of SEQ ID NO:13 haplotype is indicative of an increased risk for SCA2 disease.

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### REMARKS

With entry of this amendment, claims 12-14 and 16 are pending. The claims have been rewritten in accordance with telephone interviews held on August 13 and 21, 2002 between the Examiner and the undersigned, and a facsimile communication from the Examiner. Amendment is made to overcome 35 USC § 112, second paragraph issues, and not for the purpose of overcoming any prior art. No new matter has been added.

All objections and rejections having been addressed, it is respectfully submitted that the application is in condition for allowance, and Notice to that effect is respectfully requested.

Respectfully submitted,

Dated: August 21, 2002

  
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